

US EPA ARCHIVE DOCUMENT

November 21, 1997

MEMORANDUM

TO: Nick Vizzone, EPA

THROUGH: Mary Wolfe, SAIC

CC: Anita Cummings and Elaine Eby, EPA

FROM: Howard Finkel, ICF

SUBJECT: Calculation of Universal Treatment Standard (UTS) for HTMR Residues Using Data Submitted by Horsehead Research Development Co., Inc. and INMETCO

Now that the dust has finally settled, I went back and thoroughly checked the data and formulas used in the UTS calculations. I found two transcription errors in the INMETCO raw data for antimony and revised the UTS level accordingly. In addition, although I was not instructed to do so, I included the 74 additional data points for silver that were submitted by INMETCO in response to the second supplemental proposal. I hope that this was okay; however, I could not see any reason for not including the 74 grab samples. As a result, the UTS number for silver also changed accordingly.

I present the results of the calculations of new UTS levels for HTMR residues using (1) Horsehead's data, (2) INMETCO's data, and (3) the combination of Horsehead's and INMETCO's data in Exhibit 1. For comparison, Exhibit 1 also presents the UTS levels calculated by Versar using data submitted by INMETCO. I also present all of the supporting worksheets as attachments.

If you have any questions, or wish me to prepare a memorandum documenting all of the manipulations (I could not prepare one within the 8-hr limit) please call me at 703/934-3656.

EXHIBIT 1

**SUMMARY OF REVISED UTS LEVELS FOR HTMR RESIDUES
(ALL VALUES HAVE BEEN ROUNDED TO TWO SIGNIFICANT FIGURES BY EXCEL)**

	HRD	INMETCO-New	INMETCO-Versar	HRD & INMETCO
Antimony	0.61	0.025	0.043	0.45
Arsenic	0.022	0.028	0.026	0.035
Barium	5.9	2.4	3.3	6.3
Beryllium	0.0028	0.028	0.018	0.013
Cadmium	0.056	0.11	0.20	0.033
Chromium	0.28	0.60	0.85	0.15
Lead	0.19	0.10	0.12	0.18
Mercury	0.028	--	--	0.028
Nickel	0.089	11	13.6	26
Selenium	0.022	0.29	0.29	0.095
Silver*	0.020	0.14	0.11	0.063
Thallium	0.084	--	--	0.084
Vanadium	--	0.028	0.015	0.028
Zinc	2.3	3.8	3.8	2.7

* Includes the 74 additional grab samples collected between January and May 1997 that were submitted by INMETCO in their comments on the 2nd Supplemental.

ATTACHMENTS

HORSEHEAD RESEARCH COMPANY (HRD)

INMETCO

HRD & INMETCO